

REMARKS

This Application has been carefully reviewed in light of the Final Office Action mailed July 29, 2004. In order to advance prosecution of this case, Applicants amend Claims 1, 3-7, and 14. Applicants respectfully request reconsideration and favorable action in this case.

Allowable Subject Matter

Applicants note with appreciation the Examiner's indication that Claims 1 and 3-8 would be allowable if Claim 1 were rewritten to correct certain informalities identified by the Examiner. Applicants amend Claim 1 to address the Examiner's concerns. Claim 1 is thus allowable. Applicants also amend Claims 3-7 to correct various informalities. Applicants respectfully request reconsideration and allowance of Claim 1 and its dependents.

Section 102 Rejections

The Examiner rejects Claims 21-22, 26-27, and 31 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,714,785 issued to Han ("*Han*"). Claim 21 recites:

A method of providing communication service comprising:
receiving a handoff request from a mobile communication unit communicating on a first network;
determining, in response to the handoff request, whether the mobile communication unit is located within a designated handoff transition area;
executing a handoff, between the first network and a second network, of communication with the mobile communication unit, if the mobile communication unit is located within the designated handoff transition area;
and
denying the handoff request if the mobile communication is not located within the designated handoff transition area.

Han fails to teach, either expressly or inherently, every element of Claim 21. *Han* fails to teach "determining, in response to the handoff request, whether the mobile communication unit is located within a designated handoff transition area" as recited by Claim 21. The portion of *Han* cited by the Examiner to reject this element discloses only that "the service base station examines whether a handoff is requested or not, depending on the pilot signal power from the adjacent base station and the location flag." Col. 8, ll. 58-61. Thus, *Han* determines whether a handoff *is requested* based on the location flag. *Han* does not "determine, in response to the handoff request, whether the mobile communication unit is located within a designated handoff transition area" as recited by Claim 1.

Furthermore, *Han* also does not teach "executing a handoff, between the first network and a second network, of communication with the mobile communication unit, if the mobile communication unit is located within the designated handoff transition area" or "denying the handoff request if the mobile communication is not located within the designated handoff transition area." The location flag of *Han* is set to zero when "the mobile station is located closer to the service base station than the adjacent base station." Col. 7, ll. 26-29. Moreover, the location flag is set to one when "the mobile station is located closer to the adjacent base station." Col. 7, ll. 59-60. Thus, the location flag of *Han* merely indicates whether the mobile station is located closer to the base station currently servicing the mobile station than to an adjacent base station. The location flag does not relate in anyway to whether the mobile station is "located within a designated handoff transition area."

In addition, to whatever extent *Han* can be said to "deny the handoff request," this operation is performed based on other considerations, and not on the location flag relied upon by the Examiner. More specifically, in the system of *Han*:

the service base station determines from the examined direction flag whether the mobile station is moving towards the adjacent station. If it is determined that the mobile station is moving towards the adjacent base station, the service base station proceeds to step 823. Otherwise, *when it is determined that the mobile station is not moving towards the adjacent base station*, the service base station proceeds to step 827 to cancel the handoff and then ends the procedure.

Col. 9, ll. 8-18; emphasis added.

Thus, to whatever extent *Han* can be read as disclosing any executing or denying of a handoff, these steps are performed based on whether the mobile station is moving towards an adjacent base station and not on whether the mobile station is "located within a designated handoff area." Therefore, for at least these reasons, *Han* does not disclose "executing a handoff, between the first network and a second network, of communication with the mobile communication unit, if the mobile communication unit is located within the designated handoff transition area" or "denying the handoff request if the mobile communication is not located within the designated handoff transition area" as recited by Claim 21.

As a result, *Han* fails to teach, either expressly or inherently, every element of Claim 21. Claim 21 is thus allowable for at least these reasons. Applicants respectfully request reconsideration and allowance of Claim 21 and its dependents.

Although of differing scope from Claim 21, Claims 26 and 31 include elements that, for reasons substantially similar to those discussed with respect to Claim 21, are not taught by the cited reference. Claims 26 and 31 are thus allowable for at least these reasons. Applicants respectfully request reconsideration and allowance of Claims 26 and 31, and their respective dependents.

Section 103 Rejections

The Examiner rejects Claims 9-20, 23-25, and 28-30 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,828,661 issued to Weaver, Jr. et al. ("Weaver") in view of *Han*. Claim 9 recites:

A wireless base station comprising:
a sectorized base station controller operable to control communication between the base station and a mobile communication unit within an identified geographical sector within a building;
an extended antenna unit;
a signal distribution concentration unit including handoff control logic, the handoff control logic operable to:
receive a handoff request from the mobile communication unit;
execute a handoff between the base station and a macro system, in response to the handoff request, if the mobile unit is located within a designated handoff transition area within the identified geographical sector;
and
deny the handoff request if the mobile communication is not located within the designated handoff transition area; and
one or more delay element units.

Weaver and *Han* fail to disclose, teach, or suggest every element of Claim 9. *Weaver* and *Han* both alone and in combination fail to disclose, teach, or suggest handoff control logic operable to "execute a handoff between the base station and a macro system, in response to the handoff request, if the mobile unit is located within a designated handoff transition area within the identified geographical sector" as recited by Claim 9. As the Examiner admits, "Weaver fails to explicitly disclose deny[ing] the handoff request if the mobile communication [station] is not located within the designated handoff transition area." *Office Action*, p.6.

The Examiner asserts, however, that *Han* "discloses denying the handoff request if the mobile communication [station] is not located within the designated handoff transition area (the combination of step 821 and step 827, see figure 8)." The portion of *Han* cited by the Examiner, however, merely describes a location flag utilized by the mobile base station. As discussed above, the location flag of *Han* is set to zero when "the mobile station is located closer to the base station currently servicing the mobile station than to an adjacent base station." Col. 7, ll. 26-29. Moreover, the location flag is set to one when "the mobile station is located closer to the adjacent base station." Col. 7, ll. 59-60. Thus, the location flag of

Han merely indicates whether the mobile station is closer to a particular service base station or an adjacent base station. The location flag does not reflect in any way whether the mobile station is within a "designated handoff transition area," only which of two base stations is closer to the mobile station.

Moreover, as noted above, to whatever extent *Han* can be interpreted as teaching any executing or denying of handoff requests, these steps are performed based on whether the mobile station is moving towards an adjacent base station and not on whether the mobile station is "located within a designated handoff transition area." Col. 9, ll. 8-18. Thus, the *Weaver-Han* combination does not disclose "executing a handoff, between the first network and a second network, of communication with the mobile communication unit, if the mobile communication unit is located within the designated handoff transition area" or "denying the handoff request if the mobile communication is not located within the designated handoff transition area" as recited by Claim 9. Therefore, for at least these reasons, the *Weaver-Han* combination fails to disclose, teach, or suggest every element of Claim 9.

In addition, the proposed *Weaver-Han* combination is improper as such a combination would change the principle of operation of both references. Both *Weaver* and *Han* stress the difference between soft handoffs and hard handoffs. *Weaver*, col. 2, ll. 61-65; *Han*, col. 1, ll. 21-33. As *Han* indicates:

Handoffs are generally divided into soft handoffs and hard handoffs. With regard to the soft handoff, a service is concurrently provided through a channel assigned from an adjacent handoff target base station and a channel assigned by a service base station and then, the channel from the service base station is disconnected when a channel quality of the service base station becomes lower than a predetermined threshold. With regard to the hard handoff, when a channel quality of the service base station becomes lower than a threshold during a call, the channel to the service base station is disconnected and thereafter, a new channel is assigned from an adjacent base station.

Han, col. 1, ll. 21-33

In addition to drawing a clear distinction between hard handoffs and soft handoffs, *Weaver* explicitly notes that the *Weaver* system "relates to providing a mechanism of hard handoff between two systems[.]" Col. 8, ll. 47-49. By contrast, the *Han* system utilizes a soft handoff. More specifically, *Han* does not perform a handoff until a channel is available on the adjacent network, indicating clearly that *Han* is a soft handoff system. Col. 9, ll. 18-

23; Fig 8. Thus, combining the handoff techniques of *Han* and *Weaver* as the Examiner proposes would clearly change operational principles of both references with respect to how handoffs are performed. As the M.P.E.P. states “[i]f the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, the teaching of the references are not sufficient to render the claims *prima facie* obvious.” M.P.E.P. § 2134.02. Therefore, the proposed combination is improper for at least this reason.

Furthermore, *Weaver* clearly teaches away from such a combination emphasizing the deficiencies of soft handoffs, such as those disclosed by *Han*. *Weaver*, col. 8, ll. 36-47. As *Weaver* stresses, the system of *Weaver* provides “a mechanism of hard handoff between two systems to avoid the complications and expense of intersystem soft handoff.” As the M.P.E.P. states, “[a] prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention.” M.P.E.P. § 2141.02, underlining in original. Thus, the contradictory portions of *Weaver* must be considered in determining whether the prior art teaches the elements of Claim 9. Consequently, *Weaver* teaches away from the proposed *Weaver-Han*, and this combination is improper for at least this additional reason.

Thus, the *Weaver-Han* combination fails to disclose, teach, or suggest every element of Claim 9. Furthermore, the proposed combination of *Weaver* and *Han* is, in fact, improper. Claim 9 is thus allowable for at least these reasons. Applicants respectfully request reconsideration and allowance of Claim 9 and its dependents.

Claims 23-25 and 28-30 depend from Claims 21 and 26, respectively, which have both been shown above to be allowable. Claims 23-25 and 28-30 are thus allowable for at least these reasons. As noted above, Applicants respectfully request reconsideration and allowance of Claims 23-25 and 28-30.

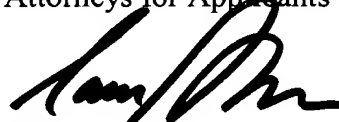
Conclusions

Applicants have made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicants respectfully request full allowance of all pending Claims. If the Examiner feels that a telephone conference or an interview would advance prosecution of this Application in any manner, the undersigned attorney for Applicants stands ready to conduct such a conference at the convenience of the Examiner.

No fees are believed to be due, however, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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